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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/741,284	12/20/2000	Shoou-I Wang	06068 USA	6496
23543	7590	06/10/2004	EXAMINER	
AIR PRODUCTS AND CHEMICALS, INC. PATENT DEPARTMENT 7201 HAMILTON BOULEVARD ALLENTOWN, PA 181951501			CLARKE, SARA SACHIE	
			ART UNIT	PAPER NUMBER
			3749	

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/741,284

Applicant(s)

WANG ET AL.

Examiner

Sara Clarke

Art Unit

3749

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-26 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date December 20, 2000.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Please direct any future response to this office action to art unit 3749.

Election/Restrictions

Claims 1-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in the paper filed March 24, 2004.

Claim Objections

Claim 26 is objected to because of the following informalities: on line 3, "t" should be "at." Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 21 is rejected under 35 U.S.C. 102(b) as being anticipated by Decaux et al. (CH 506609).

Decaux et al. discloses the invention as claimed including a plurality of adjacent burners 21.

Claims 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Straitz, III (US 4092095).

Straitz, III discloses the invention as claimed including a plurality of adjacent burner units (see Figs. 1 and 2), a common fuel supply 40, a common air supply 35,

means 42 for regulating a flow of fuel to each burner unit from said common fuel supply, and means 37,38 for regulating a flow of air to each burner unit from said common air supply. As per applicant's specification, the means for regulating a flow of fuel is a valve 52 and the means for regulating a flow of air are dampers 44.

Claims 21 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Welden (US 4614491).

Welden discloses the invention as claimed including a plurality of adjacent burners. See Fig. 3. The burners are equally spaced apart and can be fired at different firing rates. See column 2, lines 50 and 51.

Claims 21 and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Dutkiewicz (US 3677234).

Dutkiewicz discloses the invention as claimed including adjacent burner units variably spaced. See Figs 1 and 2 and the first full paragraph of column 3.

All of claims 23-25 recite the intended use of the claimed structure of these claims. It has been held that a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (BPAI 1987) Since Dutkiewicz discloses all of the claimed structure, Dutkiewicz anticipates the claims. Moreover, since Dutkiewicz discloses each of the burners having valves 40, the device of Dutkiewicz necessarily can provide the functions of either providing the same firing rates or differing firing rates.

Claims 21 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Herder (US 4252300).

Herder discloses the invention as claimed including a plurality of adjacent burners units (see Figs. 1 and 2) and at least one burner unit 30-1 combusts at least one first fuel or fuel mixture containing the first fuel (gas) and at least one other burner unit 30-2 combusts at least one second fuel (oil) or a fuel mixture containing a second fuel.

Regarding the functional language of claim 21, since all of the references listed above disclose the claimed structure of claim 21 (i.e., the plurality of adjacent burners), they anticipate claim 21. Moreover, since all of the references listed above disclose the structure or structures, which applicant discloses as providing the function, e.g., the variably spaced burners or different burners burning different fuels, the structures disclosed by these references necessarily provide the claimed functions.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Briggs (US 5417564) discloses a furnace with variably spaced burners. Brunner (US 3135314) discloses multiple burners burning multiple fuels.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara Clarke whose telephone number is (703)308-1388. The examiner can normally be reached on Mon-Fri, 8:30-1:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached at (703)308-1935. The fax phone number for the organization where this application is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sara Clarke 
Primary Examiner
Art Unit 3749

June 10, 2004